MADE IN CHINA

CB MINI

Citizens Band Radio

•Modulation Mode: FM /AM •Noise Cancelling
ECHO •RF GAIN Adjustment •Roger Beep
•DW •TOT •MUTE •MIC GAIN Adjustment
•Backlight Brightness Adjustment •ASQ / SQ

USER'S MANUAL

To customers

Thank you very much for using our two-way radios. This product has a newly developed function menu and humanism operation design, making it easy to use. It will meet your requirement by the compact size and reasonable price.

Thank you for choosing our CB MINI mobile transceiver, always provides high quality products, and this transceiver is no exception. As you learn how to use this transceiver, you will find that is pursuing "user friendliness" . For example, each time you change the menu no. in Menu mode, you will see a text message on the display lets you know what you are configuring.

Though friendly design for user, this transceiver is technically complicated and some features may be new to you. Consider this manual to be a personal tutorial from the designers, allow the manual to guide you through the learning process now, then act as a reference in the coming years.

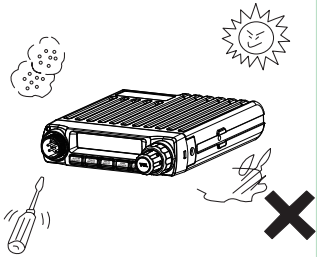
Please contact the local authorized dealer if you have any questions. We are not responsible for any typographical errors that may be in this manual. Standard accessories may change without notice, getting your understanding for any inconveniences.

When programming the transceiver, read the factory initial data firstly, then rewrite the frequency and signaling etc., otherwise errors may occur because of different frequency band etc..

Precautions

Please observe the following precautions to prevent fire, personal injury, or transceiver damage:

- Do not attempt to configure your transceiver while driving,it is dangerous.
- This transceiver is designed for a 13.8V DC power supply. Don't use a 24V battery to power on the transceiver.
- Do not place the transceiver in excessively dusty, humid or wet areas, nor unstable surfaces.
- Please keep it away from interferential devices (such as TV, generator etc.)
- Do not expose the transceiver to long periods of direct sunlight nor place it close to heating appliances.
- If an abnormal odor or smoke is detected coming from the transceiver, turn OFF the power immediately. Contact local service station or your dealer.
- Do not transmit with high output power for extended periods; the transceiver may overheat.



CONTENTS

Supplied accessories 02

Installation 04

Functions and features 09

Front panel buttons' definitions 10

Hand mic buttons' definitions 11

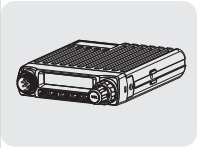
Menu operation instruction 12

Specifications 21

Supplied Accessories/Optional Accessories

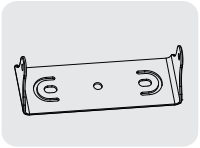
Supplied Accessories

After carefully unpacking the transceiver, identify the items listed in the table below. We suggest you keep the box and packaging.

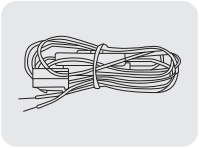


radio body *1

Microphone*1

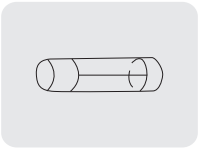


Mobile Mounting*1

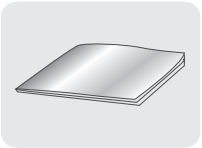


Power Cable*1

Hardware*2



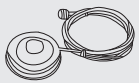
Fuse*1



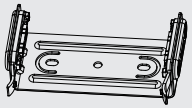
User's Manual*1

Optional Accessories

Car Antenna*1



Sucker*1



Screw-free Mount*1

Cigarette cable*1

Connection cable*1

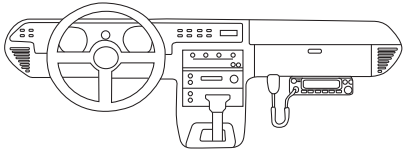
Microphone*1

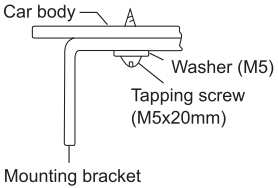
Initial Installation

Mobile installation

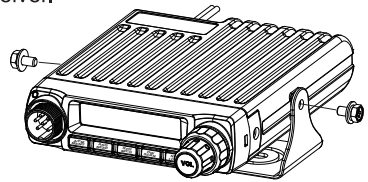
To install the transceiver, select a safe, convenient location inside your vehicle that minimizes danger to your passengers and yourself while the vehicle is in motion. Consider installing the unit at an appropriate position so that knees or legs will not strike it during sudden braking of your vehicle. Try to pick a well ventilated location that is shielded from direct sunlight.

1. Install the mounting bracket in the vehicle using the supplied self-tapping screws (4pcs) and flat washers (4pcs).

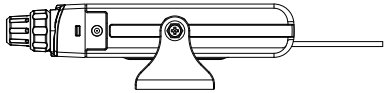




2. Position the transceiver, then insert and tighten the supplied hexagon SEMS screws.
   - Double check that all screws are tightened to prevent vehicle vibration from loosening the bracket or transceiver.



- Determine the appropriate angle of the transceiver, using the screw hole positions on the side of the mounting bracket.



DC Power Cable Connection

NOTE: Locate the power input connector as close to the transceiver as possible.

Mobile Operation

The vehicle battery must have a nominal rating of 12V. Never connect the transceiver to a 24V battery. Be sure to use a 12V vehicle battery that has sufficient current capacity. If the current to the transceiver is insufficient, the display may darken during transmission, or transmitting output power may drop excessively.

1. Route the DC power cable supplied with the transceiver directly to the vehicle's battery terminals using the shortest path from the transceiver.
   - We recommend you do not use the cigarette lighter socket as some cigarette lighter sockets introduce an unacceptable voltage drop.
   - The entire length of the cable must be dressed so it is isolated from heat, moisture, and the engine secondary (high voltage) ignition system/ cables.
2. After installing cable, in order to avoid the risk of damp, please use heat-resistant tap to tie together with fuse box. Don't forget to reinforce whole cable.

The transceiver will return to its normal operation when the power is switched ON or repeat above operation.

Important: The range of displayed voltage is only from 7V to16V DC, because the displayed value is estimated, please use a voltmeter when a more precise reading is desired.

Antenna Connection

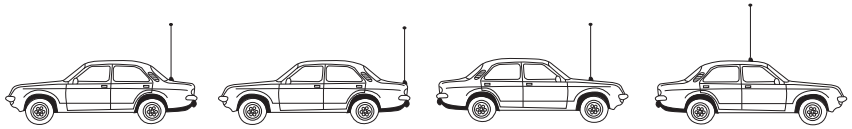
Before operating, install an efficient, well-tuned antenna. The success of your installation will depend largely on the type of antenna and its correct installation. The transceiver can give excellent results if the antenna system and its installation are given careful attention.

Use a 50Ω impedance antenna and low-loss coaxial feed-line that has a characteristic impedance of 50Ω, to match the transceiver input impedance. Coupling the antenna to the transceiver via feed-lines having an impedance other than 50 * reduces the efficiency of the antenna system and can cause interference to nearby broadcast television receivers, radio receivers, and other electronic equipment.

NOTE: Transmitting without first connecting an antenna or other matched load may damage the transceiver. Always connect the antenna to the transceiver before transmitting.

All fixed stations should be equipped with a lightning arrester to reduce the risk of fire, electric shock, and transceiver damage.

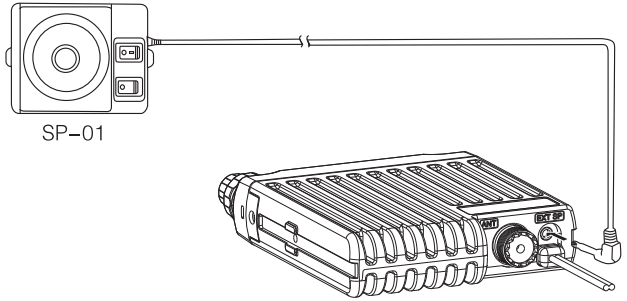
The possible locations of antenna on a car are shown as following:



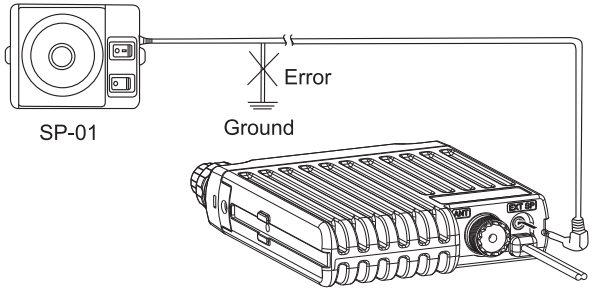
Accessories Connections

External Speaker

If you plan to use an external speaker, choose a speaker with an impedance of 8Ω. The external speaker jack accepts a 3.5 mm(1/8") mono (2-conductor) plug.

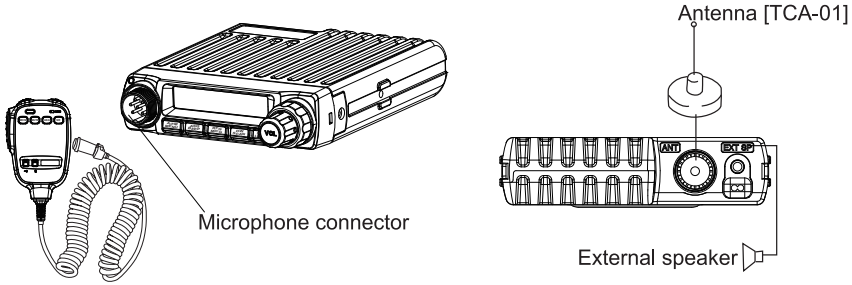


NOTE: External speaker adopt double port BTL, please care about the connecting way. The speaker can not connect with the ground, otherwise the speaker will be fault. The wrong connecting way as the following picture.



Microphone

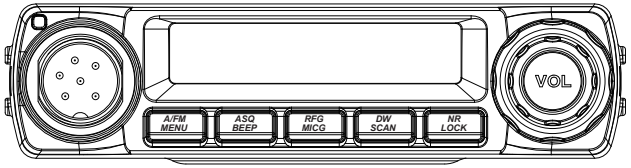
For voice communications, connect a microphone equipped with an 8-pin modular plug into the modular socket on the front of the main unit. Press firmly on the plug until the locking tab clicks. Attach the supplied microphone hanger in an appropriate location using the screws included in the screw set.



Functions and features

- AM/FM
- ASQ function
- SQ function
- RF gain setting
- Mic gain setting
- Scan function
- Beep function
- RF power setting
- DW dual watch function
- TOT function
- Keypad lock function
- ECHO function
- VOX function
- TX and RX noise cancellation
- Backlight color setting
- Brightness setting
- Roger function
- Reset function
- CTCSS/DCS function(Optional)
- SSB function(Optional)

Front panel buttons' definitions

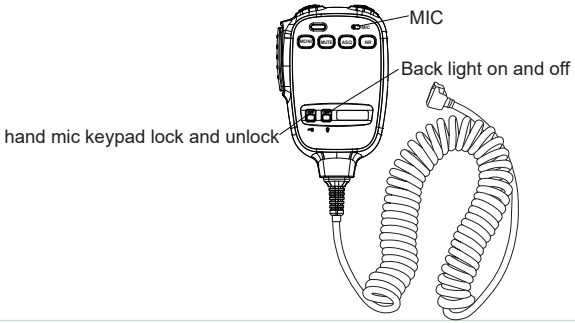


Knob: long press to change different SQ levels or ASQ levels and then press again to confirm
CH knob: to change channels
VQL knob: to adjust volume

NO.	KEY	FUNCTION
1	A/FM: AM and FM and Menu setting	Short press: exchange between AM and FM Long press: Menu
2	ASQ: ASQ setting and beep setting	Short press: Enable or disable ASQ, , if you enable this function, display will show ASQ Long press: Beep, long press to on/off
3	RFG: speaker gain setting and mic gain setting	Short press: To enter speaker gain setting and rotate volume knob to choose different level, , if you enable this function, display will show RFG and value is 1-10,level 10 is maximum. Long press: To enter mic gain setting and rotate volume knob to choose different level, value is off, 1, 2, 3, 4, 5.

NO.	KEY	FUNCTION
4	DW: Dual watch and scan function	Short press: to enter dual watch function, DW will flash and rotate CH knob to choose dual watch channel and then press DW to enter dual watch function, display will show DW and press DW again to exit Long press: to enable scan function and rotate CH knob to change the scan direction and press knob or long press DW key to exit
5	NR: RX noise reduction setting and keypad lock function	Short press: enable or disable RX noise reduction function, if you enable this function, display will show NR Long press: to lock or unlock the keypads, just long press 2S to lock and unlock keypads

Hand mic buttons' definitions



NO.	KEY	FUNCTION
1	Moni	to enable or disable monitor function
2	VOX	to enable or disable VOX function
3	ASQ	to enable or disable VOX function, if you enable it, display will show ASQ
4	NR	enable or disable RX noise reduction function, if you enable this function, display will show NR

Menu operation instruction

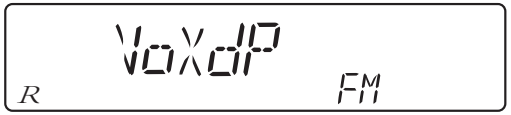
Long press A/FM MENU to enter into menu setting and you will see NRL in the display and clockwise rotate the volume knob to enter next functions
Rotate CH knob or volume knob to change menu you want to set
Press volume knob to enter that function setting
Rotate CH knob or volume knob to change different value
Press volume knob to confirm the setting, and after 2s, it will exit and back to standby mode.

1、RX noise reduction level setting
Value:1-10
Note: To use this function, please enable the RX noise reduction function first via front panel button.This level setting is also valid for TX noise reduction.

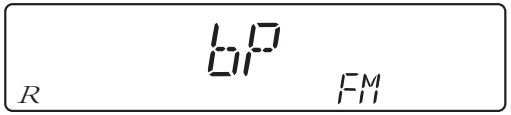
2、TX noise reduction function
On
Off

3、Vox funciton
On
Off

4、VOX delay time setting
Value: 200-2000mS



5、VOX level setting
Value: 1-10
Noted: level one is most sensitive.

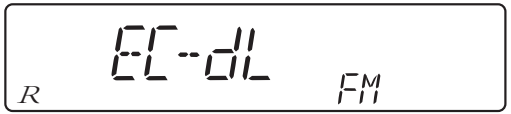


6、Beep setting
Keypad tone setting
on
off
Note: if you want this function to work, please remember not to set menu 7 beep level as off

7、Beep level setting
Off: when you set here as off, even you set menu six beep as on, keypad beep still not works,
Value: 1-15
Note: when you set this menu as off, power on/off beep will be off as well.

8、Echo setting
on: when you enable it, display will show ECHO, and make voice more stereoscopic.
off

9、ECHO level setting
Value: 1-9
Noted: level 9 is most stereoscopic.



10、ECHO delay setting
Value: 1-9
Noted: level 9 is most stereoscopic.

11、Back light color setting
Value: Cyan/Purple/Pink/White/Green/Blue/Yellow

12、Brightness setting
Value:1-10

13、Scan mode setting
SQ: During scan, if signals are detected, radio will stay in this channel.
TI: During scan, if signals are detected, radio will stay here 5S and scan again

14、Roger
On
Off

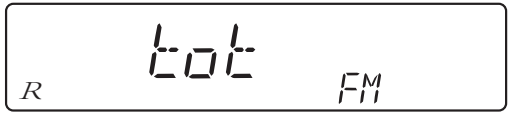
15、Roger frequency setting
Value:300-3000

16、Roger time setting
Value:100-1000mS

17、Roger volume setting
Value:1-9

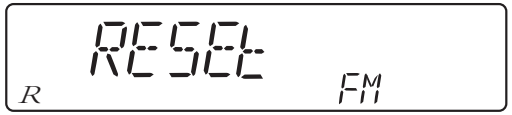
18、power on beep setting
On
Off
Noted: if you set menu 7 as off,, even you turn on this function, it doesn't work

19、Power off beep setting
On
Off
Noted: if you set menu 7 as off,, even you turn on this function, it doesn't work



20、TOT function
Off
30-600S

21、Speaker gain level setting
Value:1-10
Noted： this function is to set receiving volume, and level 10 is maximum, while MICG is to set transmitting volume and level 5 is maximum, please set different levels for RFG and MICG according to your environment.



Reset
On
Off

SPECIFICATIONS

General

Modulation Mode		AM/FM
Frequency Range		26.965-27.405MHz
Frequency Tolerance		±5.0ppm
Ferquency Control		PLL Synthesizer
Channels		40
Dimensions		144.8*108.3*26.5mm
Weight		335.3g
Operating Temperature Range		-20℃~ +50℃
Current Drain	Transmit	1.5A MAX
	Receive	Squelched 0.3A
	VOL Max	0.8A
Antenna Connector		UHF, SO-239
Input Voltage		13.2V

Receiver

Sensitivity	Less than 1uV for 10dB(S+N)/N
Image Rejection	70dB
Adjacent Channel Rejection	60dB
IF Frequencies	1st 10.695MHz
	2nd 455KHz
Automatic Gain Control(AGC)	Less than 10dB change in audio
	Output for inputs from 10 to 50000uV
Squelch	less than 1uV
Audio Output Power	2Watt, 16ohm
Frequency Response	300-3000Hz

Transmitter

Power Output	4 Watts FM/AM
Transmission interference	inferior to 4nW
Frequency Response	300-3000Hz
Modulated signal distortion	inferior to 5%
Output Impedance	50 ohms

RESTRICTIONS

PAYS	CB	RESTRICTIONS	REGLAGE		
GERMANY	YES	80 CH-4W FM-free use	EC	D	EU
		40 CH-4W AM - free use			
		40 CH-4W FM- free use			
UK	YES	Cept 40 CH - 4W FM	EC UK		
		+ENG 40 CH-4W FM-individua			
		license required			
		AM : Not authorized			
AUSTRIA	YES	40 CH-4W FM	EC		
		AM : Not authorized			
BELGIUM	YES	40 CH-4W FM - free use	EU	EC	
		40 CH-4W AM - free use			
BULGARIA	YES	40 CH-4W FM - free use	EC		
CYPRUS	YES	40 CH-4W FM- free use	EU	EC	
		40 CH-4W AM - free use			
CROATIA	YES	40 CH-4W FM - free use	EC		
		AM : Not authorized			
DANMARK	YES	40 CH-4W FM - free use	EC		
		AM : Not authorized			

PAYS	CB	RESTRICTIONS	REGLAGE		
SPAIN	YES	40 CH-4W FM-individual license required	EC	D	EU
		40 CH-4W AM-individual license required			
		12 W pep BLU/SSB			
ESTONIA	YES	40 CH-4W FM - free use	EC		
		40 CH-4W AM - free use	UK		
FINLAND		40 CH-4W FM - free use			
		40 CH-4W AM - free use			
FRANCE	YES	40 CH-4W FM - free use	EC		
		40 CH-4W AM-free use			
GREECE	YES	40 CH-4W FM-individual license required	EU	E	EC
		40 CH-4W AM -individual license required			
HUNGARY	YES	40 CH-4W FM - free use	EC		
		AM : Not authorized			
IRELAND	YES	40 CH-4W FM-free use	EC		
		AM : Not authorized			
ISLAND	YES	40 CH-4W FM - free use	EC	EU	
		40 CH-4W AM-free use			
ITALY	YES	40 CH-4W FM-general autorisation required	E	EC	EU
		40 CH-4W AM-general autorisation required			
		12 W pep BLU/SSB			
LATVIA	YES	40 CH-4W FM- free use	EU	EC	
		40 CH-4W AM - free use			
LITHUANIA	YES	40 CH-4W FM - free use	EC		
		AM : Not authorized			
LUXEMBOURG	YES	40 CH-4W FM- free use	EC		
		AM : Not authorized			
MALTA	YES	40 CH-4W FM -individual license required	EC		
		AM : Not authorized			
NORWAY	YES	40 CH-4W FM-free use	EC		
		AM : Not authorized			

PAYS	CB	RESTRICTIONS	REGLAGE		
NETHERLAND	YES	40 CH-4W FM - free use	EU	EC	
		40 CH-4W AM - free use			
POLAND	YES	40 CH-4W FM - free use	PL	EC	
		40 CH-4W AM/FM - free use			
		12 W pep BLU/SSB			
PORTUGAL	YES	40 CH-4W FM - free use	EU	EC	
		40 CH-4W AM- free use			
CZECH	YES	80 CH-4W FM- free use	EC		
		AM : Not authorized			
ROMANIA	YES	40 CH-4W FM - free use	EU	EC	
		40 CH-4W AM -free use			
SLOVAKIA	YES	40 CH-4W FM -free use	EC		
		AM : Not authorized			
SLOVENIA	YES	40 CH-4W FM - free use	EC		
		AM : Not authorized			
SWEDEN	YES	40 CH-4W FM - free use	EU	EC	
		40 CH-4W AM -free use			
SWITZERLAND	YES	40 CH-4W FM-free use	EU	EC	
		40 CH-4W AM - free use			
LIECHTENSTEIN	YES	40 CH-4W FM - individual license required	EC		
		AM :individuallicense required			

FREQUENCIES TABLE

Channel	IN	D		EU	EC	PL	UK
	1-27	1-40	41-80	1-40	1-40	1-40	1-40
	FM=4W	FM=4W	FM=4W	FM=4W	FM=4W	FM=4W	FM=4W
	AM=4W	AM=4W		AM=4W		AM=4W	
1	26,965	26,965	26,565	26,965	26,965	26,960	276,013
2	26,975	26,975	26,575	26,975	26,975	26,970	276,113
3	26,985	26,985	26,585	26,985	26,985	26,980	276,213
4	27,005	27,005	26,595	27,005	27,005	27,000	276,313
5	27,015	27,015	26,605	27,015	27,015	27.01	276,413
6	27,025	27,025	26,615	27,025	27,025	27.02	276,513
7	27,035	27,035	26,625	27,035	27,035	27,030	276,613
8	27,055	27,055	26,635	27,055	27,055	27.05	276,713
9	27,065	27,065	26,645	27,065	27,065	27,060	276,813
10	27,075	27,075	26,655	27,075	27,075	27.07	276,913
11	27,085	27,085	26,665	27,085	27,085	27,080	277,013
12	27,105	27,105	26,675	27,105	27,105	27,100	277,113
13	27,115	27,115	26,685	27,115	27,115	27,110	277,213
14	27,125	27,125	26,695	27,125	27,125	27.12	277,313
15	27,135	27,135	26,705	27,135	27,135	27,130	277,413
16	27,155	27,155	26,715	27,155	27,155	27.15	277,513
17	27,165	27,165	26,725	27,165	27,165	27,160	277,613
18	27,175	27,175	26,735	27,175	27,175	27,170	277,713
19	27,185	27,185	26,745	27,185	27,185	27.18	277,813
20	27,205	27,205	26,755	27,205	27,205	27.2	277,913
21	27,215	27,215	26,765	27,215	27,215	27.21	278,013
22	27,225	27,225	26,775	27,225	27,225	27.22	278,113
23	27,255	27,255	26,785	27,255	27,255	27.25	278,213
24	27,235	27,235	26,795	27,235	27,235	27.23	278,313
25	27,245	27,245	26,805	27,245	27,245	27,240	278,413
26	27,265	27,265	26,815	27,265	27,265	27,260	278,513
27	27,275	27,275	26,825	27,275	27,275	27.27	278,613
28		27,285	26,835	27,285	27,285	27.28	278,713
29		27,295	26,845	27,295	27,295	27,290	278,813
30		27,305	26,855	27,305	27,305	27.3	278,913
31		27,315	26,865	27,315	27,315	27,310	279,013
32		27,325	26,875	27,325	27,325	27.32	279,113
33		27,335	26,885	27,335	27,335	27,330	279,213
34		27,345	26,895	27,345	27,345	27,340	279,313
35		27,355	26,905	27,355	27,355	27.35	279,413
36		27,365	26,915	27,365	27,365	27,360	279,513
37		27,375	26,925	27,375	27,375	27.37	279,613
38		27,385	26,935	27,385	27,385	27,380	279,713
39		27,395	26,945	27,395	27,395	27,390	279,813
40		27,405	26,955	27,405	27,405	27,400	279,913

Guarantee

Model Number:_____

Serial Number: _____

Purchasing Date:_____

Dealer: _____ Telephone:_____

User's Name: _____ Telephone:_____

Address: _____ Post Code:_____

Remarks:

1 This guarantee card to be kept by the user, no replenishment if lost.

2 This guarantee card to be filled & chopped by the dealer, or it is invalid.

3 Don't alter the guarantee card, please coufirm the serial number on the guarantee card is same as that on the machine.

4 One-year guarantee, charger, battery, ear-phone, antenna and cable are not under guarantee.

5 The user can get repairing service from the followingways:

- Go to the shop where you buy the machine.
- Our local repairing agents.
- Send back to our company.

Please cut along with this line